

**IN THE CLAIMS:**

1. (Currently Amended) A cross-linking compound which comprises:
  - (a) an anhydrous hydrocarbon compound liquid at ambient temperature;
  - (b) having at least one di- or poly- Group VI-A element of the periodic table of elements; and
  - (c) a natural or synthetic polymer liquid at ambient temperature having a molecular weight less than 25,000 ~~30,000~~.
2. (Original) A cross-linking compound as set forth in Claim 1 wherein said Group VI-A element is sulfur.
3. (Original) A cross-linking compound as set forth in Claim 1 wherein said polymer is a multi-component polymer.
4. (Original) A cross-linking compound as set forth in Claim 1 wherein said polymer is saturated.
5. (Original) A cross-linking compound as set forth in Claim 1 wherein said polymer contains functional groups.
6. (Withdrawn) A cross-linking compound as set forth in Claim 1 wherein said polymer is hydroxy terminated polybutadiene.

1           7.     (Original) A cross-linking compound as set forth in Claim 1 wherein said polymer  
2 contains two or more chemical moieties.

1           8.     (Original) A cross-linking compound as set forth in Claim 7 wherein said polymer  
2 is a copolymer of butylene and butene.

1           9.     (Withdrawn) A cross-linking compound as set forth in Claim 1 including aldehyde,  
2 phenol, phenol-aldehyde, melamine or epoxy resins.

1           10.    (Withdrawn) A cross-linking compound as set forth in Claim 9 wherein said epoxy  
2 resins contains glycidyl moieties.

1           11.    (Canceled)

1           12.    (Currently Amended) A cross-linking compound which comprises:

2                   (a)     an anhydrous hydrocarbon compound liquid at ambient temperature;

3                   (b)     molecules or chemical moieties having two or more Group VI-A elements of  
4 the periodic table of elements; and

5                   (c)     a natural or synthetic polymer liquid at ambient temperature having a  
6 molecular weight less than 25,000 ~~30,000~~.

1           13.    (Original) A cross-linking compound as set forth in Claim 12 wherein said polymer  
2 is a multi-component polymer.

3           14.   (Original) A cross-linking compound as set forth in Claim 12 wherein said polymer  
4   is saturated.

1           15.   (Original) A cross-linking compound as set forth in Claim 12 wherein said polymer  
2   contains functional groups.

1           16.   (Withdrawn) A cross-linking compound as set forth in Claim 15 wherein said  
2   polymer is hydroxy terminated polybutadiene.

1           17.   (Original) A cross-linking compound as set forth in Claim 12 wherein said polymer  
2   contains two or more chemical moieties.

1           18.   (Original) A cross-linking compound as set forth in Claim 17 wherein said polymer  
2   is a copolymer of butylene and butene.

1           19.   (Original) A cross-linking compound as set forth in Claim 12 wherein said Group  
2   VI-A elements of the periodic table of elements are in terminal positions on the molecules or  
3   chemical moieties.

1           20.   (Original) A cross-linking compound as set forth in Claim 19 wherein at least one  
2   of said Group VI-A elements of the periodic table of elements is sulfur.

1           21.     (Original) A cross-linking compound as set forth in Claim 20 wherein the molecules  
2     or chemical moieties are mercaptans.

1           22.     (Original) A cross-linking compound as set forth in Claim 12 wherein said Group  
2     VI-A elements of the periodic table of elements are not in the terminal position of the molecules or  
3     chemical moieties.

1           23.     (Original) A cross-linking compound as set forth in Claim 22 wherein said Group  
2     VI-A elements of the periodic table of elements are poly-element moieties within the molecules or  
3     chemical moieties.

1           24.     (Original) A cross-linking compound as set forth in Claim 23 wherein at least one  
2     of said Group VI-A elements is sulfur.

1           25.     (Original) A cross-linking compound as set forth in Claim 23 wherein the molecules  
2     or chemical moieties are Di-tert-butyl polysulfide, Di-tert-dodecyl polysulfide, Di-tert-nonyl  
3     polysulfide or combinations thereof.

1           26.     (Original) A cross-linking compound as set forth in Claim 23 wherein the poly-  
2     element moiety is poly-sulfide.

1           27.     (Withdrawn) A cross-linking compound as set forth in Claim 23 including additional  
2     cross-linking agents of aldehydes, phenols, phenol-aldehydes, melamine resins or epoxy resins.

3           28.   (Withdrawn) A cross-linking compound as set forth in Claim 23 wherein said epoxy  
4 resin contains glycidyl moieties.

1           29.   (Withdrawn) A cross-linking compound as set forth in Claim 28 wherein the glycidyl  
2 moiety is neodecanoic acid, oxiramylmethyl ester.

1           30.   (Withdrawn) A cross-linking compound as set forth in Claim 1 including  
2 vulcanization accelerators or co-reactant.

1           31.   (Withdrawn) A cross-linking compound as set forth in Claim 30 wherein the  
2 accelerator or co-reactant is Tetramethyl Thiuram Disulfide.

1           32.   (Withdrawn) A cross-linking compound as set forth in Claim 30 wherein the  
2 accelerator or co-reactant is Tetrabutylthiuram Disulfide.

1           33.   (Withdrawn) A cross-linking compound as set forth in Claim 30 wherein the  
2 accelerator or co-reactant is a room temperature accelerator or co-reactant.

1           34.   (Withdrawn) A cross-linking compound as set forth in Claim 30 wherein the  
2 accelerator or co-reactant is Dimethyl Cyclohexyl Ammonium Dibutyl Dithiocarbamate.

1           35.   (Withdrawn) A cross-linking compound as set forth in Claim 1 including organic oils  
2 or solvents.

Claims 36 through 38 (Canceled)

1           39.   (Withdrawn) A cross-linking compound as set forth in Claim 35 wherein the organic  
2           oils or solvents are derived from natural oils.

1           40.   (Withdrawn) A cross-linking compound as set forth in Claim 39 wherein the natural  
2           oils are of either animal or vegetable origin.

1           41.   (Withdrawn) A cross-linking compound as set forth in Claim 39 wherein the oil is  
2           of vegetable origin.

1           42.   (Withdrawn) A cross-linking compound as set forth in Claim 35 wherein the organic  
2           oils or solvents contain elements of Group V-A of the periodic table of elements.

1           43.   (Withdrawn) A cross-linking compound as set forth in Claim 42 wherein the Group  
2           V-A elements contained in said oils or solvents is either phosphorous or nitrogen or both.

1           44.   (Withdrawn) A cross-linking compound as set forth in Claim 43 wherein said oils  
2           or solvents containing both phosphorous and nitrogen is lecithin.

1           45.   (Withdrawn) A cross-linking compound as set forth in Claim 1 which includes  
2           chemical moieties capable of forming an oxidation-reduction reaction.

1           46.   (Withdrawn) A cross-linking compound as set forth in Claim 45 wherein the  
2 chemical moieties capable of forming a oxidation-reduction reaction are iron sulfate and iron  
3 chloride.

Claims 47 and 48 (Canceled)

1           49.   (Currently Amended) A cross-linking compound which comprises:

2                   (a)    an anhydrous hydrocarbon compound liquid at ambient temperature having  
3 elemental sulfur, oxygen or selenium therein, wherein said hydrocarbon compound is Di-tert-butyl  
4 polysulfide, Di-tert-dodecyl polysulfide, Di-tert-nonyl polysulfide or combinations thereof; and

5                   (b)    an ethylenic polymer liquid at ambient temperature having a molecular weight  
6 less than 25,000 ~~30,000~~, wherein said polymer is a copolymer of butylene and butene.

1           50.   (Original) A cross-linking compound as set forth in Claim 1 wherein said anhydrous  
2 hydrocarbon compound is an organic process oil from crude or coal processing.

1           51.   (Original) A cross-linking compound as set forth in Claim 12 wherein said anhydrous  
2 hydrocarbon compound is an organic process oil from crude or coal processing.